

What is claimed is:

1. A computer-readable medium having computer-executable instructions for a bridge server in a multimedia conference to
5 select one video stream from video streams of multiple participants of the multimedia conference for forwarding to a client, the steps comprising:

receiving multimedia conferencing data from the multiple participants, the multimedia conference data including the
10 video streams of the participants;

monitoring participant events of the multimedia conference;

updating conferencing activity states for each of the participants according to the participant events;

15 periodically computing a weight for each of the participants based on the conferencing activity states of said each participant;

identifying a participant having a highest weight among the participants; and

20 selecting from the video streams of the participants one video stream corresponding to the identified participant having the highest weight for viewing by the client.

2. A computer-readable medium as in claim 1, wherein the
25 multiple participants are connected to the bridge server through a multicast network.

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3. A computer-readable medium as in claim 2, having further computer-executable instructions for performing the step of transmitting to the client an audio stream containing a mixture of audio signals from the multiple participants of the network conference.

4. A computer-readable medium as in claim 1, wherein the step of computing the weight includes determining whether said each participant is currently being shown to the client.

5. A computer-readable medium as in claim 4, wherein the step of computing the weight includes determining a length of time for which said each participant has been shown to the client if said each participant is currently being shown.

6. A computer-readable medium as in claim 4, wherein the step of computing the weight includes determining whether said each participant is talking.

7. A computer-readable medium as in claim 1, wherein the step of computing the weight includes determining a length of time for which said each participant has not been shown to the client.

8. A computer-readable medium as in claim 1, wherein the step of updating includes updating a table storing the conferencing activity states of the participants.

9. A computer-readable medium as in claim 1, wherein the multimedia conference streams include a combined video stream containing multiple substreams each corresponding to one of the multiple participants, and wherein the step of receiving includes demultiplexing the combined video stream into a plurality of individual video streams each including one of the substreams in the combined video stream.

10. A system for conducting a multimedia network, comprising:

a plurality of participants each providing multimedia conferencing data including video signals and audio signals;

a client in addition to the participants, the client capable of receiving a video stream corresponding to one of the participants at a time; and

a bridge server connected to the participants through a network and having a point-to-point connection with the client, the bridge server receiving the multimedia conferencing data from the participants, updating conferencing activity states for each participant, periodically computing a weight of said each participant based on the conferencing activity states of said each participant, identifying a participant having a highest weight among the participants, and selecting a video steam corresponding to the identified participant having the highest weight for transmission to the client for viewing.

11. A system as in claim 10, wherein the plurality of participants and the bridge server are connected through a multicast network.

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12. A system as in claim 10, wherein the bridge server further transmits to the client an audio stream containing a mixture of audio signals from the participants of the network conference.

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13. A system as in claim 10, wherein the computing of weight by the bridge server includes determining whether said each participant is currently being shown to the client.

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14. A system as in claim 13, wherein the computing of weight by the bridge server includes determining a length of time for which said each participant has been shown to the client if said each participant is currently being shown.

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15. A system as in claim 13, wherein the computing of weight by the bridge server includes determining whether said each participant is talking.

16. A system as in claim 10, wherein the computing of weight by the bridge server includes determining a length of time for which said each participant has not been shown to the client.

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17. A system as in claim 10, wherein the bridge server includes a table for storing the conferencing activity states of the participants.

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18. A system as in claim 10, wherein the multimedia conferencing data received by the bridge server include a combined video stream having substreams corresponding to the participants, and wherein the bridge server demultiplexes the combined video stream into a plurality of individual video streams each including one of the substreams in the combined video stream.

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